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Elements of a Strategic Implementation Plan: Implications for Enhancing Combination Classes Using a Multiage Framework

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Elements of a Strategic Implementation Plan:

Implications for Enhancing Combination Classes Using a Multiage Framework

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Signature Sheet

This thesis, written under the direction of the candidate's thesis advisor and approved by the Chair of the Master's program, has been presented to and accepted by the Faculty of Education in partial fulfillment of the requirements for the degree of Master of Science in Education. The content and research methodologies presented in this work represent the work of the candidate alone.

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Abstract

Combination classes are often created out of financial necessity rather than a desire to engage students in multiage learning. Teachers assigned to these classrooms come from the general teaching pool and may not have specialized training around the intricacies of multiage teaching.

A review of the literature indicates that the United States has a long history of multiage classrooms. When the practice of graded schools took over, however the multiage school remained as an approach to teaching children (Anderson, 1992). Progressive education programs often use a multiage classroom paired with looping, students remaining with the same teacher for more than one school year, as a way to deepen the relationship between teacher and student, and give the teacher insight into their students' learning needs (Baran, 2010). There is strong evidence that multiage programming is beneficial to students of all grades, from early childhood (Aina, 2001) to the crucial middle school years when many students begin to falter both socially and academically (Baran, 2010).

This is a phenomonilogical study examining teacher experience in combination and multiage classrooms through written records such as lesson plan books, weekly schedules and curriculum maps. Themes that emerged were a need for strategic scheduling, flexible curriculum, and strong student/teacher relationships.

Keywords: Combination classes, multiage, progressive education

Chapter 1 Multiage Programs

The student teaching process is challenging under any circumstances. For a novice teacher, placement into combination classes for a student teaching assignment is not standard practice. It is difficult for an emerging teacher to learn the curriculum strands for two grade levels, but this placement actually required learning how to manage two grade levels simultaniously, as well as learning the curriculum strands for four different grades.

Following the formal student teaching assignment, I continued to work in the public school setting as a subsitute teacher for several months, which constituted the remainder of the school year. Before the new school year, a colleague, the Head of School for a multiage K-8 program, contacted me and suggested that I consider applying for a middle school math position in a multiage setting.

My interest in considering this position involved a certain sense of curiosity about how such a program worked, from the teacher's perspective. Initially this was a graded position teaching 5th, 6th, and 7th grade math in isolation. After my interview, the academic leadership changed the position to include a multiage element. The newly created position emerged as a blend of 5th grade mathematics and 5th and 6th grade social studies in a multiage setting. I accepted the position not fully understanding the differences between multiage and combination classrooms, but shortly into the work began to see that the difference was the intentionality of the program.

Statement of Problem

Combination classes, defined as a grouping of students from two to three grades in one classroom in a public school are a necessity. In the reality of school life, principals are faced with

a difficult decision when the number of students in a particular grade level exceeds the set teacher-student ratio maximum. Budget constraints may not allow for the creation of a new classroom with a low teacher-student ratio. To solve this problem, the extra students are combined with students from another grade level to make a new class (Kasten & Clarke, 1993). Teachers are often not given specialized training on how to manage the combined classroom, and it is expected that students will master, and teachers will teach, the traditional curriculum. What is missing from this is intention. The reality of combination classes, primarily in elementary schools is ongoing, whether as a standard practice or developed as needed. The problem is that often neither principals nor classroom teachers, intentionally create a structured program that considers the evidence-based practice of multiage programming (Trochim, Donnelly & Arora, 2016). Evidence-based practice "…represents a major attempt of the research enterprise to achieve a better integration of research and practice" (p. 9). There are many practices that are inherent in multiage programs that can improve the practice of combination classes in a public school.

Purpose Statement

The purpose of this study is to document discreet components of an intentionally structured multiage program as compared to combination classrooms in practice. This study is intended as a contribution to knowledge that is motivated by pragmatic concerns of fluctuating enrollment. This study involves a close review of previous research on multiage programming along with an examination of a multiage curriculum model which could be used to construct a framework for implementation of combination classrooms in the public school setting.

Research Questions

What does the research literature reveal about the components of an intentional multiage program? What do the artifacts of history, lesson plans and scheduling, from student teaching and a year of professional assignment in a multiage classroom, reveal about structures that contribute to intentionality in a public school combination classroom? How can this research be integrated to create a curricular framework for the modern public school faced with the need for combination classrooms?

Definition of Terms

For the purposes of this paper, multiage programs are defined as programs where children of different ages and grade levels are "intentionally combined in a single classroom to realize academic and social benefits" (Stuart, Connor, Cady, & Zweifel, 2006, p. 13). Multiage programs may also be referred to as nongraded, ungraded, mixed age, and multi-age. In a multiage classroom, the curricular goals for each grade are often combined to allow for mixed age learning.

A combination classroom is described as a setting where students from two grade-levels placed together "as a solution to imbalanced enrollments or budget constraints" (Mason & Stimson, 1996, p. 439). A combination classroom may also be referred to as a combo or a split class. A combination class is usually a short-term solution to fluctuating enrollment in a public school, and the students are placed together for one year only. Within a combination classroom, the graded teachers are expected to provide instruction following the established curriculum goals, limiting the opportunity for mixed age learning.

An intentional multiage program is one that considers the following aspects when planning the class: how the curriculum is taught, what additional support is in place for the teachers and students, and how teachers enhance the social/emotional development of the students.

Other terms used here include: decision makers, people in charge of student distribution and classroom makeup. Specials refer to extra classes that are added to the schedule to provide enrichment. In the public school setting, music and physical education are common specials. Looping is a term used to describe both student/teacher relationships and curricular planning. Looping with students and teachers refers to the class, or a group of students, remaining with the same teacher for more than one school year. Looping curriculum means studying one set of curricular goals for the first year, followed by a second one the following year, and then the curriculum "loops' back to the first year.

Theoretical Rationale

The theoretical rationale for this study is rooted in the work of Bandura's (1977) social learning theory. This theory asserts that learning is reinforced through observing others, and that "most of the behaviors that people display are learned" through the influence of others (Bandura, 1977, p. 5). Additionally, Bandura states that under social learning theory that the learner does not passively receive knowledge, but instead must actively engage with the learning (1977). Throughout a child's development, he or she is learning, through observing the actions of those around him or her, how to anticipate probable outcomes to actions and begin to respond accordingly. This idea of stimulus control is one that carries through a person's life and allows people to not "act blindly in ways that might eventually prove to be highly unproductive, if not

perilous" (Bandura, 1977, p. 12). Stimulus control and learning through observation are natural elements of multiage learning, and provide a rationale for examining the practice through this lens.

Within the multiage classroom, older students serve as role models for their younger peers, and students new to the class. By observing their older peers modeling specific behaviors, the students in the younger grade are learning from each other in addition to learning from the teacher. By using the theories behind social learning, a teacher can create a multiage environment that is intentional, improving opportunities for student success.

Multiage programs tend to incorporate project-based learning and integrated curriculum whenever possible. According to Kasten and Clarke (1993), the teaching model for a multiage classroom is "interactive in nature" (p. 10). Learning is not passive in a multiage classroom, instead it is active and interactive with both teacher and students working in partnership throughout the day. Discourse, small group projects and peer to peer learning are all parts of an effective multiage program, giving students multiple opportunities to observe and model what their peers are doing (Kasten &Clarke, 1993).

Assumptions

This study assumes that the majority of public schools are not intentionally planning their combination classes, making them difficult to implement. Teachers who are involved with a multiage or combination class may need support in order to be effective in optimizing the benefits of the multiage classroom. It is also assumed that there are schools where multiage and combination classrooms are being planned intentionally and effectively and can serve as models

for other programs. The final assumption is that there may an ongoing need for multiage or combination classrooms in the public school system.

Background and Need

Limited research indicates that multiage classrooms provide social/emotional benefits on children. Morris (2002) chronicled the implementation of a yearlong, multiage school in Virginia and through his research he found that the multiage grouping had more of an impact on the program than the impact of the new calendar (Morris, 2002). Through interviews with teachers, administrators and parents, Morris identified a consistent message expressed that the multiage grouping was in fact more important than the year-round schedule as it allowed the younger students to observe and model the older students, and it helped less mature students feel more comfortable in the classroom environment. The majority of comments during the interviews and focus groups centered on the social aspects of the new model, and the teachers "believed that the students were impacted less by the year-round calendar, but more by the multiage grouping" (Morris, 2002, p. 8).

As part of the study Morris examined the reasons behind the desire to participate in a year-round school, and found one that is a staple of multiage learning: looping. In the school being studied, students remained with the same teacher for more than one year, allowing increased time to develop strong student/teacher relationships. The participants stated that the school appeared to them as focused on student (Morris, 2002).

When reflecting on his own expectations for the study, Morris states that he was surprised at how important the multiage aspect of the program became to the parents and

teachers. Based on his past experiences, his expectation was that the multiage element would be secondary; instead he found that it had "become as important as the year-round calendar" (Morris, 2002, p. 14). Morris concludes his paper with a call for further study on multiage grouping within a year-round school setting.

Summary

The impetus for this study was the researcher's personal experience while working as a student teacher. Limited research indicates there is much to be gained for students and teachers within a multiage classroom, yet in practice it has been reserved for private schools, and progressive education. Bandura's social learning theory supports the educational practices involved in multiage programming. While it may not be feasible for a public school to transition to multiage, there are elements that for potential consideration in developing a framework for combination classrooms.

Chapter 2 Review of the Literature

Introduction

This section is an examination of the research literature on multiage programs. Information was gathered from academic library searches using online resources, and books. Research information is organized in the following categories: Case Studies, Statistical Information, Historical Trends, Pedagogical Methods in Multiage Education, and a Review of Academic Research.

Pan (2013) identified critical issues for consumers of research to consider in reviewing papers for inclusion in a research paper. These components included sample type, description of data collection, methods such as interviews or focus group questions, description of interview procedures, and author analysis of the strengths and weaknesses of the study. The research selected for inclusion in this paper, indicated that these components were taken into consideration.

The majority of research around multiage programs are a miuxture of case studies which examine how specific programs transitioned from single to multiage, grade-specific comparisons using statistical analysis, and examinations of historical trends around multiage programs from the one room schoolhouse to modern education. In addition, research of pedagogical methods connected to multiage education, namely looping, flexible grouping strategies, and teacher preparation were examined.

Case Studies

Case studies detail how schools have transitioned from the traditional single-grade program to a multi-age program. In 2009, faculty members at Saint Mary's College (SMC) were invited by the Saint George Parish School to collaborate on a project that hoped to develop "a creative program that would be beneficial to all" (Proehl, Douglas, Elias, Johnson, & Westsmith, 2013, p. 419). The school was faced with declining enrollment and recently adopted a multi-grade approach. This collaboration was unique in that there was not a clear goal to start, simply a desire to understand the impact of the shift to multi-grade and to identify ways to strengthen the classroom instruction. In addition, the SMC researchers did not design the study, rather they served as facilitators who helped the parents, and staff created a participatory action research project.

For the study, the team collected "parent surveys; school-maintained statistics on absenteeism, tardiness, and test scores; and parent and teacher interviews" (Proehl et al., 2013, p. 424). The parent surveys were focused on their reasons for sending their child to Saint George, as well as their satisfaction with the school, and less on the multi-grade aspects of the school. However, the high level of parent satisfaction (84%) can be taken as an endorsement of the multi-grade program. The school data spanned three years-,the year prior to the switch to multi-grade and the two following years, and only included the students who had attended Saint George the year prior to the transition to multi-grade. The research team discovered that there was no substantial impact on student absenteeism, tardiness, or test scores. The school atmosphere, and the levels of parent involvement increased following the transition to multi-grade.

Aina (2001) completed a qualitative study of a multiage classroom set within a larger, traditionally graded school. The classroom was part of a multi-year trial of multiage grouping and looks more like what a school would call a combination classroom, as it is dependent upon enrollment. What sets this classroom apart is that the teacher conducted research on multiage programming and set up her curriculum and classroom with that in mind. Aina (2001) wanted to investigate "a contemporary phenomenon within its real-life context" (p. 220). Many of the findings are echoed throughout other similar studies. Benefits included increased opportunities to differentiate instruction, for students to learn from one another and to serve as role models, deepening understanding of the material based on "synthesizing and internalizing" the knowledge when helping their fellow students with content already mastered (Aina, 2001, p. 224).

The parents interviewed were initially concerned about placement of their child in a multiage classroom. When re-interviewed at the end of the year, many of their fears had been assuaged. The chief concerns were ones that are often associated with combination classrooms, and not multiage classrooms. The perception with a combination classroom is that the students in the older grade are usually lower performing. One parent expressed "I did not want him placed in a class that is used as a dumping ground for children that were all labeled as low or should have been retained" (Aina, 2001, p. 222). While not all of the parents were fully convinced that multiage was the best fit for their child, many of the misconceptions they held were dispelled and all reported seeing a growth in the maturity level of their child, which was attributed to the multiage classroom (Aina, 2001).

The teacher reported that the prep work required for a multiage classroom often felt overwhelming. In this case, the teacher is the only one teaching in a multiage classroom, which led to feelings of isolation. The "preparation is enormous, overwhelming, challenging, but at the same time very rewarding," (Aina, 2001, p. 223). Aina shares a concern for the multiage classroom that has a teacher not willing to put forward that level of work, or is content to teach as if it were a traditional graded classroom. If that is the case, the students will not see the benefits of a multiage program, and would be better suited to learn in a single-graded classroom, (Aina, 2001).

The Kentucky Education Reform Act (KERA), implemented in 1990, included a multigrade mandate in grades 1-4, (Wright, 2013). The Kentucky Supreme Court declared that the school system was flawed and needed to be vastly overhauled. The multigrade mandate was one aspect of a progressive focus on education with the understanding that "the success or failure of the experiment would not be known until a generation of Kentucky schoolchildren had been educated under the new system," (Perkins, &Westin as cited in Wright, 2013). Wright (2013) found that the multigrade mandate was one of the reforms that met significant backlash from the community. While this paper does not isolate the statistics specifically for multigrade programing, the research cited supports the research conducted by Ong, Allison and Haladyna (2000) showing that multigrade is a successful strategy for specific student populations.

Kobelin (2009) examined differentiation within her classroom. Faced with what she referred to as a "multiage" classroom, it fits more with the definition of a combination class, full of a variety of abilities, she had a need to differentiate to keep her students engaged and challenged. The paper focuses on math because, as Kobelin points out, "Common practices for

teaching reading and writing—guided reading groups (Fountas & Pinnell, as cited in Kobelin, 2009) or the writing workshop model (Calkins & Mermelstein , as cited in Kobelin, 2009)—allow children to pursue work at a variety of levels" (Kobelin, 2009, p. 11). Most math programs expect students to logically progress through a series of skills at more or less the same rate, and are clearly designed for a single-age program. Kobelin used the school-provided materials to create a singular, but differentiated math program for her 1st/2nd class. Kobelin's experience offers insight into how a teacher managed the dual demands of meeting the state standards for both grade levels while also meeting the differentiated needs of a multi-grade class.

Heins, Tichenor, Coggins and Hutchinson (2000) provide a clear description of what a true multiage program looks like, i.e., no markers identifying students into a specific grade level, flexible space, students work together at their ability level on projects, students are able to work at their own pace through a set of expectations or standards that are developmentally appropriate. In addition, Celebration School in Celebration Florida is profiled, giving a detailed description of their K-12 multiage program. Central to most successful multiage programs is the family-like atmosphere created by the school, and Celebration School sets up that expectation from the beginning by naming each of the school levels a "neighborhood." Also integral to the multiage experience is the idea of student centered learning. Instead of teachers, each group has "learning leaders," and the physical space is designed with collaboration between all the age levels and within the neighborhood groups.

The authors quote Surbeck, stating that a teacher be given at least two years to "plan including observing in appropriate sites, experiencing various ages, and creating unique programs to meet the needs of specific school populations as well as individuals," (Surbeck, as

cited in Heins, Tichenor, Coggins & Hutchinson, 2000, p. 5). The authors stress the need for careful reflection and time to ensure that all pieces are in place before beginning a multi-age program.

Carter (2005) reflects on her experience as a teacher in a multi-age classroom, which combines 1st-3rd grade, in Reno Nevada. The majority of her students are English language learners and receive free or reduced lunch. The parents are asked to commit to the classroom for three years and while there are a few who leave, the majority of the students are there for the full three years. This reflection serves as a counterpoint to the study done by Ong et al. (2000) who found that Hispanic and Title 1 students do not perform as well in a multi-age program as they do in a single age program. While Carter's piece is primarily anecdotal, it does give a glimpse into how an intentional program with well-trained teachers can be used to successfully combine social-emotional literacy with academic success for our most needy students.

DelViscio and Muffs (2007) provide a snapshot of a successful single-age, departmentalized, looped program at a small elementary school in Iowa, where DelViscio serves as the principal. The Bishop Dunn School had only one class and teacher per grade. The administration decided to combine looping and departmentalization, where the teacher teaches one subject to multiple grades over the course of one day, to create a new program. The teachers specialized by topic and served as homeroom teachers. These are methods common in multiage program and allow for flexible grouping. Since the teachers see the same students over the course of three years, they have a firm grasp on the scope and sequence of the students' learning (DelViscio & Muffs, 2007). In addition to providing an overview of the program, the authors looked at the standardized test scores to validate the change in program. They found academic gains in all the

looped grades, as well as "impressive" gains for fourth grade students who were in their second year of the looping program (Del Viscio & Muffs, 2007, p. 3).

Statistical Information

Extensive research on the academic impacts of multiage grouping was conducted by Ong, Allison, and Haladyna in 2000. Their study focused on the student achievement in 3rd graders in comparable single and multi-age classrooms. Using achievement test data from 6 different schools in 3 urban Arizona school districts, they examined the academic achievement in reading, writing, and math. The total sample consisted of 615 students from distinctly different socioeconomic and ethnic backgrounds. In addition to studying the achievement differences between multiage and single-age students, the researchers examined the differences between boy/girl, Title I/Non-Title I and Ethnic groups. The researchers also studied the interactions between the multiage/single-age and the other variables. Through their research, it was determined that while there were academic improvements in all subject areas for multiage students, not all students benefitted from the multiage grouping. Title I and Hispanic students did not show measurable improvements in a multiage classroom (Ong et al. 2000).

Pratt (2009) details the success of a multiage looping model for gifted students at the researcher's school. The program spans 3rd-5th grade with the students staying with the same teacher for at least 2 years. 132 former students were surveyed and 96.9% answered that a major strength of the program was being with the same teacher each year. 100% of the parents responded that looping had a positive impact on their child. In addition, the previous findings of social emotional benefits are highlighted within the paper. While this focuses on gifted students, the results support Ong's research as well (Ong et al. 2000).

In a counterpoint to Ong and Carter (2005) conducted a short survey of the reading levels for her students who were primarily English language learners. When presented with an opportunity to compare two student populations due to a change in schools, Carter used the Developmental Reading Assessment (DAR) to compare the levels of 3rd grade students who had been with her for two years, versus the new third grade students. She found that the returning students scored higher on the DAR than the new students (Carter, 2005). While recognizing that this is a small sample size, and that the study focuses on one academic area, it does suggest that more research should be done on the benefits of multiage programming for English Language Learners.

Baran (2010) examines the practice of looping, a student staying with the same teacher over the period of at least two years, within the context of middle school. Middle school is a critical time in a student's development as it marks the first time that a student has more than one student, making it easier for them to "fall through the cracks." Looping often goes hand in hand with multi-age classrooms benefitting both teachers and students, giving them time to form strong bonds and deep understandings around student learning. While this research deals with graded looping, rather than multiage looping, it is important to consider the positive and negative effects of looping when considering multiage programs.

For this study, Baran surveyed teachers and students to discern what they perceived to be the advantages and disadvantages to a looped program (2010). The teachers felt that the looping system enabled them to create closer bonds with their students and their families, and that it "enhanced instruction and learning," (Baran, 2010, p. 9). The closer bonds also led to what was perceived as a drawback for teachers. Some felt that they knew more about the students, and

their families, than was comfortable. Other drawbacks were difficult separations when the students would complete their looping, and a feeling of separation from the teachers who were not part of the looped program (Baran, 2010).

The students who were interviewed came from grades seven and eight and were interviewed separately. The Grade Seven students said "they preferred looping to the conventional classroom setting," (Baran, 2010, p. 10). The main concern expressed by Grade Seven was that they would get stuck with a bad teacher. The Grade Eight students reported many of the same positive aspects of looping, and reported that their relationships with peers and teachers grew stronger during the second year of looping. Grade Eight was also worried about being stuck with a bad teacher, but they also expressed nervousness about leaving the looped environment (Baran, 2010).

Mason and Stimson (1996) discuss the differences between graded combination and nongraded classrooms, along with various other terms for each type of classroom. In addition, the researchers looked at the frequency of each type of classroom in 12 states and other factors related to the frequency of non-traditional classrooms.

The researchers designed a survey to collect data to see how students were grouped for instruction. The categories included Single Grade, 2-Grade Combination, 3-Grade Combination, and Nongraded. The survey was sent to seven hundred and twenty elementary schools from 12 states. They had a response rate of 79%, which represented 571 school principals. According to the results, 95.3% of the classrooms in the participating schools were traditionally graded with single grades (Mason & Stimson, 1996). Additionally, 36 of the 42 principals, who used combination classes due to budgetary needs, reported that they had higher use of combination

classes. Fourteen of the principals commented that they had more frequent use due to the adoption of more progressive programming such as "continuous-progress or multiage programs and philosophy" (Mason & Stimson, 1996, p. 445). This signals that schools were looking at multiage elements to improve combination classes rather than to have a temporary, budget-related solution.

Mason and Doepner (1998) interviewed 36 school principals regarding their views on combination classes, and how they go about selecting students and teachers, as well as what curriculum strategies are necessary to make this style of teaching work. The purpose of their study was to provide perspective for future researchers and inform others who are implementing this style of classroom within their school (Mason & Doepner, 1998).

The participants for Mason and Doepner's study were randomly selected from the two largest counties in California. 200 schools were selected and given a pilot survey. The responses were sorted, and 36 principals (16 males and 20 females) were randomly selected to participate in individual, audio taped interviews, which lasted 40-60 minutes. Through these interviews, they found similar challenges and advantages that other researchers have found: more work for teachers, resistance from parents, and teachers who are not willing to work in a combination class. A common thread in the responses was that combination classes require the "appropriate" type of student. This is supported by Ong's 3rd grade study, which illustrates that certain subsets of students have more success than others within a combination or multiage classroom (Ong et al. 2000).

The advantages discussed by the principals have already been discussed and supported in previous research; however, one new advantage was brought forward- exposure to new

curriculum. For example, the 3rd grade students in a 3/4 combination would be exposed to 4th grade material throughout the year, giving them a perceived advantage upon entering the 4th grade.

When asked about how students are selected for a combination class, the majority of those interviewed stated that they used teacher recommendations when forming classes, followed closing by a homogeneous grouping by ability. Three of the principals reported that they would not put students in a combination class two years in a row.

The final area covered in the interviews was curriculum. What curriculum strategies do the principals encourage the combination class teachers to use? Over half reported that, with the exception of math, combining the topics was necessary. They recognized that a teacher could not be expected to cover everything for each grade; instead they should look for overlap and opportunities to present content whole class. This idea is supported by Kobelin's reflection on how she was able to differentiate in her math class (Kobelin, 2009).

Mason and Doepner (1998) were surprised that none of the principals interviewed cited research when discussing how they made decisions around combination classes. In addition, they believe that by placing the more experienced teachers in a combination class, and filling it with more advanced students is diminishing the learning environment in the single-graded classrooms. They argue that this is also masking the potential negative effects of a combination class, i.e. lower achievement rates. If a principal is "stacking the deck" in favor of the combination class as a way to gain support for its creation, then they are not presenting a clear picture of the damaging effects that a combination class can have.

In their conclusion, Mason and Doepner (1998) suggest that further study of the teaching methods used by successful combination class teachers could benefit single-grade teachers in their practice. Since combination teachers are managing two grade levels, differentiation is part and parcel of their practice, and can help single-grade teachers juggle the demands of the wide-array of learning needs for today's students.

Fosco, Schleser, and Andal (2004) examined the effects of cognitive developmental levels and reading comprehension levels in early elementary school students with the premise that students in multiage programs tend to show a higher level of cognitive development. Their study was part of a larger longitudinal study evaluating the impact of multiage classrooms versus the traditional classroom. The participants were two hundred and twelve kindergarten through second grade students from three elementary schools in the Chicago metropolitan area. The students were split equally between grades, and multiage and traditional classrooms. Developmentally, the students ranged from preoperational to concrete operational. To help validate the findings, the researchers matched the participants on age and gender. The students selected had only been in single grade classrooms throughout their short school careers. The students were tested twice during the year, and the researchers found no significant differences in reading achievement between multiage and traditional classroom students. They did find that students in the multiage classrooms reached higher developmental levels at a faster pace than did their single grade peers, however, all of the participants had reached the concrete cognitive developmental level by the end of second grade. The students who had a higher developmental level did score higher on the test, but the researchers concluded by stating that they believed the test used to measure the reading achievement, did not, in fact, give them a clear picture about the

students' abilities in reading achievement. The test measured if a student could read, but not the reading process (Fosco, Schleser, & Andal, 2004).

Historical Trends

Much of the research conducted on multiage education examines the historical trends. There are several papers which chronicle the development of multiage education from the traditional one-room schoolhouses that "dotted the rural landscape from the mid-17th to the mid-19th centuries," (Pardini, 2005, p. 2) to the use of multiage education as a mandate in education reform.

Prior to the early 1800s, most schools were made up of students from the privileged classes. These schools were private and for those who were heading for careers in either politics or the church. Education for the masses involved simple skills training and religious literacy (Anderson, 1992). From here, the one-room schoolhouse served as "an accidental prototype of nongradedness" (Anderson, as cited in Pardini, 2005). As the population grew, so did the public schools, and in the late 1800's, graded education replaced multiage education (Yarborough & Johnson, 2000). It was thought that a graded system would be able to produce students with "similar competencies" (Day & Yarbrough 1998, p. 2) necessary for factory work during the Industrial Revolution. The graded system remains the norm despite the fact that we are no longer a factory, or industry based society, and that a multiage program better reflects the student's life outside of the classroom. While students in smaller, rural schools were still educated in one-room schoolhouses, the principles of multiage education were not being utilized.

Kappler and Roellke (2002) illustrate the dramatic shift from multiage to single-age in their research. In the days of multiage learning, over half of the student population was taught in the one-room schoolhouse to today where, 95% of students are being taught in a single-grade class.

By the early 1990s, multiage education came back into public education, most notably through the previously discussed Kentucky Education Reform Act. In 1991, Oregon called for a feasibility study on a mandated ungraded program, but the program was never put into place. At the time, multiage programming was seen as a popular educational reform as it was grounded in developmentally appropriate practices (Pardini, 2005).

The passage of the No Child Left Behind Act in 2001 led to higher accountability pressures and has moved the focus firmly to academics and away from social and emotional learning. The grade specific testing and standards that come with NCLB make multiage learning difficult to implement. This has led to a decline in multiage programs and may have prompted Kentucky to relax the multiage mandate that was part of KERA (Pardini, 2005).

Pedagogical Methods and Implementation

Multiage education requires specific pedagogical methods and careful implementation to be successful. Much of the research conducted on multiage learning is connected to how teachers teach and how the programs are created.

Yarborough and Johnson (2000) examined some of the reasons why multiage programs are not more popular in contemporary educational practices. Among the reasons are: tradition, implementation time, recruiting qualified faculty, support from leadership and the community at

large, competing innovations, and a lack of agreement about what nongradedness means. Within this paper, the authors go on to provide a counter-argument to each of the perceived barriers.

Hoffman (2002) examines how flexible grouping strategies, serve to support multiage classrooms, and provide the collaborative structure that is vital to the success of a multiage classroom. Hoffman refers to Chapman's work in 1995 on the primary uses of flexible grouping strategies to illustrate how they are used within a multiage classroom. In reviewing the different groupings that occur throughout the day in a multiage, and often in a single-age, classroom, Hoffman identifies dyads as being integral to multiage learning, especially as related to math. Carefully monitored dyads working on solving word problems can push the students toward a higher-level dialogue. Students in different stages of development learn how to engage in discourse and to articulate their thinking. There needs to be a framework for the discussion, and teachers need to monitor the groups to ensure that each member is doing the work instead of relying on their more able, or more engaged, partner. With careful planning and a clear structure, this type of activity can lead to great development for students. Hoffman concludes with the idea that just as collaboration among students is a hallmark of multiage classrooms, so should collaboration among teachers. By working in close concert, colleagues are able to work together to create a program that is consistent and nurtures the abilities of each learner (Hoffman, 2002).

Summary

The majority of the research around multiage programs and classrooms focuses on the historical trends, and the social-emotional benefits of such a program. There has been limited focus into the academic benefits of a multiage program, yet a lack of academic progress is often cited as a reason not to have multiage classrooms. The reviewed case studies show that there is

little to no drop in academic performance, and that multiage programming can increase test scores and provide a variety of academic benefits beyond higher test scores.

A multiage program requires thoughtful implementation and highly trained teachers in order to be successful. In addition, principals and other community leaders need to be aware that the benefits may not be immediately visible.

There is much more research needed around multiage programming. Teachers can see the academic benefits to this kind of programming, but the research is insufficient to support this. What is clear is that there are benefits to a multiage program. There are more opportunities for students to learn from each other, serve as classroom leaders, and to develop a strong relationship with their peers and teachers. Knowing this, the question becomes, how can teachers and principals create a short-term, temporary combination classroom that can maximize these benefits?

Missing from the review is an examination of how elements of multiage education can be used when planning and implementing a combination class. Given that education in the United States has historical roots in multiage groupings, and there are documented social/emotional benefits for students, it stands to reason that these elements should be in mind when creating an implementation plan for combination classrooms. This study seeks to create a proposed framework for schools and/or districts to follow when creating these classrooms. This study illustrates the need for consistency of implementation to maximize the proven benefits of a multiage classroom.

Chapter 3 Method

Research Approach

This study is qualitative in design examining the phenomenon of multiage education, using a participatory action research (PAR) method focusing on observations of curriculum, scheduling, and settings. The tenets of PAR, according to McIntyre (2007) include:

> (a) a collective commitment to investigate an issue or problem, (b) a desire to engage in self- and collective reflection to gain clarity about the issue under investigation, (c) a joint decision to engage in individual and/or collective action that leads to a useful solution that benefits the people involved, and (d) the building of alliances between researchers and participants in the planning, implementation, and dissemination of the research process." (p.1)

The major elements of a PAR study that are evident in this study include the commitment to study a particular issue, self-reflection to gain clarity around the issue, and an action to address the issue. The findings are based on personal observations, in both a combination and multiage classroom, along with the examination of a successful curricular model for a multiage school.

Ethical Standards

This paper adheres to the ethical standards for protection of human subjects of the American Psychological Association (2010). The nature of the research is observation and action driven, using data and artifacts from the classroom of which the researcher is the teacher.

Sample and Site

School A is a large, suburban, TK (Transitional Kindergarten) through 5th grade public school in the greater San Francisco Bay Area. The population of 357 students has a large percentage of Hispanic or Latino Students, 64.4%, with 47.3% of ELL and 72.3% identified as Socioeconomically Disadvantaged (SARC, 2015). The median income of the area is $91,375.

Classroom A was a combined Kindergarten and 1st grade room. The classroom was comprised of ten kindergarten students and eleven 1st grade students. Of the 21 students, 15 were classified as English Language Learners, and one student had an identified behavior issue with a behavior plan. The teacher of record reported that this was the first time working in a combined classroom.

Classroom B was a combined 3rd and 4th grade room. The classroom was comprised of eight 3rd grade students and twelve 4th grade students. Of the 20 students, 12 were classified as English Language Learners, one had identified hearing loss with an IEP, and two students had an identified behavior issue with a behavior plan. The teacher of record did not indicate if this was the first time working in a combined classroom.

School B is a small, suburban Kindergarten through 8th grade private school in the greater San Francisco Bay Area. The school follows a multiage philosophy with all grade levels, except for Kindergarten, working in a multiage setting. Classroom C is a combined 5th and 6th grade room. The classroom was initially comprised of 9 fifth-grade and 9 sixth-grade students. Additional students were added throughout the year, with the ending totals as 11 fifth-grade and 11 sixth-grade students.

A main component of School B's philosophy is a small student to teacher ratio. The large number of students in Classroom C necessitated the addition of a team teacher to allow for smaller student groupings and targeted single grade instruction in mathematics.

Access and Permissions

The research is based on classroom artifacts and observations of the researcher. The researcher, as such has access and permission implied. All participants cited in personal conversations granted the researcher permission.

Data Gathering Procedure

The data includes lesson plan books from two combination classroom teaching terms, along with sample lessons, schedules, and observations/reflections of the researcher. These artifacts and observations were collected during the researcher's experience as a student teacher, and address the question of what structures are already in place that contribute to intentionality in a public school combination class. In addition, the schedules, curriculum map, and lesson plans from school B were examined in order to consider the benefits of multiage learning for both students and teachers.

In addition, the curriculum map, lesson plan book, sample lessons, schedules, and observations/reflections of the researcher's year as a teacher in a multiage classroom. These artifacts and observations were collected throughout the school year.

Data Analysis Approach

Given that the data is largely based on historical artifacts of learning and teacher observations, the initial approach was through comparing and contrasting. Elements inherent in each classroom were examine through the lens of multiage programs. Commonalities, or themes, emerged, giving a narrower focus for further examination.

The initial analysis was conducted via a study of the daily and weekly schedules for all three classrooms observed. Elements that reflected multiage practices were noted and recorded, along with areas where multiage practices were not being implemented. These recorded notes were then examined for commonalities to all classrooms, focusing on the records that indicated multiage practices. Through this analysis, three themes connected to multiage practice emerged: a flexible approach to the yearly curriculum, strategic scheduling, and strong student/teacher relationships. Once the themes had emerged, the data was then further examined to identify how each classroom was successful, and where improvements could be made to enhance the multiage benefits. A discussion of these themes, and the findings, takes place in Chapter Four.

Chapter 4 Findings

What does the research literature reveal about the components of an intentional multiage program? What are the benefits for students and teachers involved in a multiage classroom? What do the artifacts of history, lesson plans and scheduling, from student teaching and a year of professional assignment in a multiage classroom, reveal about structures that contribute to intentionality in a public school combination classroom? How can this research be combined with a curricular model to create a feasible plan for the modern public school faced with the need for combination classrooms?

The research shows that there is modest support for a feasible curricular plan that blends intentional multiage elements within a public school combination classroom. Combination classrooms in public schools can be re-thought by using elements of multiage programming to improve the experience and learning for both students and teachers.

The table below lists the artifacts and school documents used in this research, along with the school origin, and purpose for the research.

Artifacts Examined

Artifact	Program	Purpose
Common Core State Standards	School A School B	Curriculum Planning
Curriculum Map	School B	Curriculum Planning
Common Core Math By Grade	School B	Curriculum Planning
Lesson Book A	School A	Daily Schedule and Curricular Focus
Lesson Book B	School B	Daily Schedule and Curricular Focus
Schedule A	School B	School-wide Schedule
Personal Observations	School A School B	Themes

Themes

After examining the key artifacts for this study, three major themes emerged- a flexible approach to the yearly curriculum, strategic scheduling, and strong student/teacher relationships are necessary elements to a successful year for a combination and multiage classroom. Within

all of the classrooms, there was evidence of these elements, as well as missed opportunities within the combination classrooms to enhance these elements. A closer analysis of each of these elements follows.

Curriculum Planning

Beginning in 2010, California became one of the many states to formally adopt the Common Core State Standards (CCSS). The CCSS are a framework to build the yearly curriculum around, with desired skill mastery for each grade level. Currently, California has standards in place for mathematics, and English language arts. The standards are still being developed for Science, and frameworks exist for physical education and social studies. With the adoption of these standards, flexible curriculum planning for multigraded, public school classrooms became more challenging, especially in mathematics. Within each of the grade standards there is overlap, however, there still exist grade specific content, which needs to be taught. At School A, in both Classrooms A and B, mathematics was almost exclusively taught in graded groups. When the teacher felt as if one of the grades could benefit from a re-teach of a skill or concept, they were included in the lesson, but for the most part, the teacher had to teach two separate math lessons within a 90-minute block. At School B mathematics was taught in a similar way, with the exception of the $5^{th}/6^{th}$ grade class. Due to the size of the class, a second teacher was brought on faculty to teach the 5^{th} grade students, while the 6^{th} grade students were taught by the math and science teacher. At School A in both classrooms, science and social studies were taught whole class with elements from both grade levels introduced throughout the year. Whenever possible, the teachers planned targeted lessons for graded groups, along with

grade-specific field trips, to address elements of the grade standards. At School B, the curriculum is "looped" in that one year the students study the language arts and social studies curriculum for one grade- Year A- and the following year- Year B- they study the curriculum for the other grade. This is a common method for language arts, (Kobelin, 2009) but is not always utilized for social studies. One of the concerns in using this method is that students who either come in or leave mid-way through the loop, are going to miss or repeat a year of content. The $5^{th}/6^{th}$ grade teacher said that this could be addressed for students who come in mid-way by offering an independent study option in lieu of repeating, however, there is not a quick solution for those who miss a year (Personal communication, Javier Montiel, 1/30/15). A public school principal, who utilizes the looped social studies curriculum when combination classes are needed, told me that he informs parents who transfer in or out that this gap could arise. Despite the possibility of this gap, he feels that looping the curriculum is an element in reducing the teacher workload in regards to planning and prep time (Personal communication, Pepe Gonzales, 4/2/15).

Due to the limited time for instruction within a school day, flexibility in curriculum planning is the recommended approach for a public school faced with the need for a combination classroom. School A was able to do this in an informal manner in that the planning was left up to the classroom teacher. If the school was to formalize this by creating a documented curriculum plan for a combination classroom, the potential for an innovative program is enhanced. The curriculum plan should look for maximum opportunities for combined learning paired with targeted grade specific time to address certain standards. The way to achieve this is through strategic scheduling.

Strategic Scheduling

The second theme to emerge was that of strategic scheduling. Both schools engaged in reflective scheduling as a way to meet the needs of the students and the teachers. The schedules were not static, they were fluid and tried to maximize the overlap in standards whenever possible. However, School B demonstrated a better mastery of strategic scheduling, than did School A, largely due to the multiage focus. The Classroom A teacher did dual lessons in math and language arts for the first part of the year before recognizing that her schedule allowed for greater overlap. Since the kindergarten students have a shorter day than did the 1st grade students, she was able to plan 1st grade specific content for the afternoon. While she continued the dual math lessons, she used them as a way to reinforce math skills for the 1st grade while teaching the content to the kindergarten.

In Classroom B, most elements were taught through dual lessons, with the teacher working with one grade on a concept while the other grade worked independently. Combining curricular concepts becomes more difficult in upper elementary grades with the introduction of the high-stakes testing that occurs. Teachers are under more pressure to teach the test concepts; so curricular blending may not always work. By adding a student teacher for 15 weeks, some of the dual planning was alleviated, however a different approach to the schedule and planning may have had a bigger impact without adding another teacher. While Kobelin (2009) was working with lower grades and a graded range of standards, her method of teaching the standards to the combined class paired with differentiating the student homework and activities could have been utilized with Classroom B's schedule. The weekly schedule had three math blocks Monday through Wednesday with split, graded math on Thursdays and Fridays, paired with music. The three combined blocks could have been spent on whole class standards with the two grade specific blocks spent remediating and targeting grade-specific content in small groups. Likewise

with language arts, the curriculum offered numerous opportunities for combined learning, with overlapping concepts and leveled readers that could be structured for the combination class. In the year since completing my student teaching, the district has adopted Writers Workshop; a program that lends is well suited for multiage learning and is the curriculum used by School B.

For both Classrooms A and B, "specials," extra classes such as music and physical education, were used to allow for enhanced learning for the students, and often added targeted, small group time for the teachers. An example of enhanced is in Classroom A where the kindergarten students were able to participate in physical education, an activity normally reserved for first grade and up. Targeted small group time was added for Classroom B with the grade specific music time, giving the teacher one weekly session with each grade to work on mathematics.

The Classroom C schedule was a combination of split grade and mixed grade learning blocks. Due to the added resources as a private school, the students had art, drama, Spanish, music, and physical education as specials, giving the classroom teachers multiple prep periods per week. Since the number of students in Classroom C exceeded the school's ratio, mathematics, art, Spanish, and science were taught in graded groups, giving the classroom teacher an opportunity to work with each graded group two times a week to address specific skills and standards. Language arts and social studies were taught whole class at the start of the year with both teachers working in conjunction with each other. However with the addition of four new students throughout the first semester, the class was split into two mixed age groups for small group classes. This split preserved the integrity of the multiage philosophy, while allowing for the proper ratio of student to teacher.

Strong Student/Teacher Relationships

The third theme to emerge was the importance of strong student/teacher relationships. The teachers of Classrooms A and C were able to loop with many of their students, in that this was their second year working with them. Since the teachers and the students had already spent a year establishing relationships and procedures, the amount of time needed at the start of the year to establish procedures was minimal. The returning students were able to help the new students learn the classroom norms, allowing for more time to be spent on nurturing the student/teacher relationship and on academics. The warmth shown between the teachers of Classroom A and C and their students was evident. The new students quickly adapted to the classroom environment and the classroom culture was quickly created.

Classroom B did not have the benefit of looping, but the teacher did take the time to establish positive relationships with the students. I would argue that having either grade loop with the teacher would have enhanced the classroom experience for both the teacher and the students, and may have raised the level of learning for all. It should also be noted that many of the third grade students had higher academic levels than did their fourth grade peers. In the successful multiage program observed by Kasten and Clarke, (1993) they noted of the family-grouped model "it is a heterogeneous group of children representing the intellectual, cultural, and economic profile of the school where the classroom exists (p. 3). This represents a missed opportunity to include an element of an intentional multiage program that may have positively impacted the student/teacher and peer-to-peer relationships within the classroom.

Chapter 5 Discussion /Analysis

Summary of Major Findings

With all themes there was evidence of multiage elements in the combination classroom, when compared with the multiage classroom. There also existed room to enhance these elements to add to the social and academic benefits for the students and the teacher. Both combination class teachers used the curriculum to their advantage whenever possible, however, this type of creative curricular planning takes time that teachers may not have. With both combination classrooms there was an effort to use the schedule strategically to allow for greater planning time, however, more resources may have allowed for greater flexibility with the curriculum. The teachers in both classrooms fostered strong relationships with their students, however, the teacher in Classroom A had the advantage of looping with her first grade students.

Comparison of Findings to the Literature

The themes that emerged through this study are in-line with the findings from the literature. There are many academic and social/emotional benefits for students, however the additional planning work required of teachers can make multiage learning difficult to implement in a public school setting.

Aina (2001) found that multiage programming allowed for more differentiation of the curriculum, along with opportunities for the students to serve as role models and deepen their understanding of concepts through aiding their fellow students. Classrooms A and C maximized these benefits through combined lessons, looping and collaborative, multiage groupings whenever possible. Aina also found that the preparatory workload was high for the multiage

teacher, which was echoed in the observations and work performed in all three classrooms. This further supports the need for there to be support systems, such as extra prep periods or an instructional aide, in place for teachers working in a combination classroom.

Kobelin (2009) utilized the standard, graded curriculum as a way to differentiate mathematics instruction for her combination classroom. While this method took a lot of work at the beginning of the year, the benefit was that she was able to meet the dual needs of state mandated curriculum and the needs of her students. Classrooms A and B utilized this to a limited degree, using overlapping concepts to teach dual lessons, however there was the potential for this method to be used throughout the curriculum to lessen the teaching load, and meet the needs of all learners. Classroom C utilized curricular looping for language arts and social studies curriculum but taught math and science through graded instructional periods. Due to the additional resources afforded to a private school, increased specials subjects and periods, allowed for targeted, grade-level instruction in language arts to ensure that the students were meeting the state standards.

Baran (2010), DelViscio and Muffs (2007), and Pratt (2009) studied the benefits of looping as related to student-teacher relationships. When the students and teachers loop together for more than one year, the teachers have a better grasp on the scope of their student's learning. This insight creates stronger relationships between peers and the teacher and students. Classrooms A and C both had the benefit of student looping, and that was reflected in the classroom environment. Classroom B did not have looping students, which made the start of the year more challenging for the teacher and students. There was an ease within Classrooms A and C that was not reflected in Classroom B.

Mason and Doepner (1998) surveyed school principals regarding combination classrooms and found that the increased workload for the teacher was a challenge for implementing these classrooms, and that repeated exposure to concepts and curriculum was an advantage for students. This is in line with the observations in all three classrooms. There existed a heavier workload for all teachers; however, the students were given enhanced exposure to the concepts.

Yarborough and Johnson (2000) examined reasons why multiage programs are not more popular in modern education, and found many of the challenges faced by all of the observed teachers. Implementation time, training, and support from leadership, are all cited as obstacles to implementing multiage programming in schools. As stated before, the teacher workload is increased, and teachers are often not given additional support and resources from the school leadership.

Hoffman (2002) identified flexible grouping strategies as a way to support multiage learning within the classroom. Classroom A used mixed age groupings and collaborative learning opportunities to enhance student learning whenever possible. Classroom B had mixed age table groups, however, they did not participate in collaborative learning situations on a consistent basis. Classroom C excelled at flexible grouping, providing students opportunities to learn in a multitude of grouping scenarios.

An analysis of the literature supports the themes that had developed through the examination of the artifacts. Multiage programs are successful when they utilize a flexible approach to curriculum, strategic scheduling, and strong student/teacher relationships through looping. Public schools have the potential to enhance both student and teacher experience within combination classrooms by incorporating these themes into the implementation of these classes.

Limitations/Gaps in the Research

The sample size is small, and the situation is unique to the researcher. The study conditions could not be repeated to observe commonalities,. It would be better instead to create and plan for combination classes that utilizes multiage elements, to their maximum benefit, and implement them within a school. Gaps include limited evidence on the effect of multiage age class settings on student learning and social/emotional etc.

Recommended Implementation Plan

Based on the findings of this study, along with a review of the relevant literature, an implementation plan based around the three themes is recommended:

Flexible approach to the yearly curriculum:

Whenever possible, the curricular areas of the two grades should be combined. This serves two purposes: 1) it reduces the teacher's planning workload, and 2) it allows the teacher to more easily differentiate student work with already leveled materials (Kobelin, 2009). This may require an initial heavy workload while the teacher examines the district-adopted curriculum materials, but once this task is completed, it need not be repeated, unless there are new materials being introduced. If the district employs Instructional Coaches, part of their role should be to work with the teacher to ensure that the grade-level standards and needs of the students are both being met.

Strategic scheduling:

A well-planned schedule is necessary to make the multiage combination classroom work. Strategically scheduled specials can give the teacher opportunities to meet with smaller groups of students for grade-specific learning time. If the school budget permits, the combination class should be given additional specials to help achieve this goal. Another solution is to find a credentialed Instructional Assistant to work on a part-time basis to assist in the classroom. Whenever possible, the integrity of mixed-age groupings should be maintained, but not at the risk of failing to meet state mandated standards.

Student/teacher relationships:

Whenever possible, the teacher should be looped with the students in the classroom. More specifically, at least one of the grades should have students who are continuing in the combination classroom with their teacher. The older grade should be looped, in order to give the students the opportunity to serve as procedure role models for the younger grade. If the combination classroom is not needed the following year, the younger students should loop with the same teacher to the older grade, giving them the same opportunity to serve as role models for the new students who are coming into the classroom. In addition to providing opportunities for students to serve as role models, this practice would give the teacher and the student a longer period of time to develop and nurture their relationship, and give the teacher more insight into the student's academic and social needs. When selecting students for combination classrooms, decision makers need to ensure that there is a heterogeneous mix of students, and should not make decisions based solely on academic abilities. This does not mean that academic level should be ignored, but it should not be the only factor.

Implications for Future Research

Studies have been done on both combination classrooms, and multiage programs. However, extensive research is lacking on how multiage programming can inform the implementation of combination classes. A future study examining the impact of the Recommended Implementation Plan would provide a great service to principals and school districts when deciding how to staff and populate these classes.

Overall Significance of the Study

This study provides a unique insight into a comparison of two short-term combination classrooms with that of a long-term multiage classroom. This study identified areas where combination classrooms are successfully implementing elements of multiage programming, and areas where they could do more to create a sense of intentionality around these short-term classes.

While an initial read of the literature review reveals different themes, a closer analysis shows support for the findings of the study. An original assumption was that school leadership was not implementing combination classrooms with intentionality making them difficult for teachers to run. While the leadership may not have an implementation plan, the classroom teachers are applying a variety of teaching strategies, many of them inherent to multiage programming, to reduce the workload and enhance student engagement and learning. With further support from leadership, at both the school and district level, combination classrooms can reflect the elements of multiage learning. The research that exists shows that there are benefits to students engaged in multiage learning. By supporting an implementation plan with explicit

research, schools can create a program that meets their short-term financial needs, and allows for greater student success.

Many of the strategies that the teachers in the combination classrooms used were those that work in both graded and multiage programs. Flexible grouping, re-teaching through repeated exposure to the concept or curriculum, and collaborative group work are elements found in the modern classroom. What makes them effective in multiage programs is the fact that the students are in a setting with more than one grade-level allowing for peer-to-peer learning and greater synthesis of the material.

While there does exist research on both combination classrooms and multiage programming, there is no recommendation, or plan, on how to implement a combination classroom in a public school setting. While this study is filtered through a specific comparison and experience, the general plan for implementation has the potential to serve as a model for districts to work off of when planning combination classrooms to meet a short-term need.

About the Author

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Appendix A

Weekly schedule for Classroom A

Teacher and Student Teacher working in a Team Teaching setting

Day/Time Block	8:30am-9:10am	9:10am-10:00am	10:15am-10:45am	10:45am-11:30am	11:30am-12:00pm	12:45pm-1:30pm	1:30pm-3:00pm
Monday	Opening Activities Small Group Centers	Math	Calendar GLAD Unit	Big Buddies	GLAD Unit	Language Arts-Reading	Language Arts-Writing Classroom PE
Tuesday	Opening Activities Small Group Centers	Math	PE Teacher Prep	GLAD Unit	Drama	Language Swap	Language Arts-Writing Classroom PE
Wednesday	Opening Activities Small Group Centers	Math	Library	GLAD Unit	GLAD Unit	Language Swap	Language Arts-Writing 1:50pm-Dismissal
Thursday	Opening Activities Small Group Centers	Math	Music Teacher Prep	GLAD Unit	GLAD Unit	Language Swap	Language Arts-Writing Classroom PE
Friday	Opening Activities Zumba	Small Group Centers	Calendar GLAD Unit	GLAD Unit Computer Lab-Lexia	Computer Lab-Lexia	Language Swap	Language Arts-Writing

Appendix B

Classroom B Weekly Schedule: Teacher and student teacher splitting grades for language arts and mathematics work. Student teacher, teaching solo two days per week.

Day/Time Block	8:30am-9:15am	9:15am-10:05am	10:20am-11:30am	11:30am-12:10pm	12:55pm-1:30pm	1:30pm-2:00pm	2:00pm-2:55pm
Monday	Weekly Check-In Spelling Pre-Test Vocabulary	Language Arts-Reading and Writing	Math	Math	Language Swap	Social Studies Science	Computer Lab
Tuesday-Student Teacher Solo	Language Arts-Reading and Writing (Split)	9:35am-Library	Math	Math	Language Swap	Social Studies Science	Social Studies Science
Wednesday-Student Teacher Solo	PE Teacher Prep	Language Arts-Writing (Split)	Language Swap 10:50am-Math (Split)	Math (Split)	Social Studies	Read Aloud 1:50pm-Dismissal	
Thursday-Student Teacher Solo	Language Arts-Reading (Split)	Language Arts-Writing	Language Swap 10:50am-Math (Split)	Math- 4th Grade Music-3rd Grade	PE Teacher Prep	Read Aloud 1:50pm-Social Studies	Social Studies
Friday	Spelling Test Language Arts-Reading and Writing	Language Arts-Reading and Writing	Math 11:10am-4th Grade Music 3rd Grade Math	4th Grade Music 3rd Grade Math	Music Teacher Prep	Social Studies Science	Social Studies Science

Appendix C

School B Weekly Schedule at Start of the Year: Team Teaching Set-Up, Teacher B Solo from 12:45pm-3:10pm, and serving as Dean of Students.

Day/Time Block	8:30am-9:30am	9:30am-10:00am	10:25am-11:10am	11:15am-11:55am	12:45pm-1:30pm	1:35pm-2:20pm	2:25pm-3:10-pm
Monday	Class Meeting 8:45am-Math (Split)	Word Study SSR Typing	Social Studies	Writing Workshop	PE Teacher Prep	5th Grade Science 6th Grade Spanish	5th Grade Spanish 6th Grade Science
Tuesday	Math (Split)	Word Study SSR Typing	5th Grade Spanish 6th Grade Art Teacher Prep	Social Studies	5th Grade Art 6th Grade Novel Study	2:00pm-5th Grade Novel Study 6th Grade Science	5th Grade Novel Study 6th Grade Science
Wednesday	School Meeting 8:45am-Math (Split) 9:15am-Chorus	Chorus Teacher Prep	Novel Study	Writing Workshop	5th Grade Music 6th Grade Science Teacher Prep	Theater Teacher Prep	5th Grade Science 6th Grade Music Teacher Prep
Thursday	Math (Split)	Word Study SSR Typing	5th Grade Art 6th Grade Spanish Teacher Prep	Social Studies	5th Grade Novel Study 6th Grade Art	2:00pm-5th Grade Science 6th Grade Novel Study	5th Grade Science 6th Grade Novel Study
Friday	Math (Split)	Word Study SSR Typing	Social Studies	Writing Workshop	PE Teacher Prep	Spanish Teacher Prep	Core

Appendix D

The addition of 4 new students to the class necessitated a new schedule for the Team Teaching Morning. The following schedule reflects the changes made to the morning schedule only.

Day/Time Block	8:30am-9:30am	9:30am-10:00am	10:20am-11:10am	11:15am-11:55am
Monday	Class Meeting 8:45am- Math (Split)	Math (Split)	Social Studies-Group A Language Arts-Group B	Language Arts-Group A Social Studies-Group B
Tuesday	Math (Split)	9:15am- Social Studies-Group A Language Arts-Group B	5th Grade Spanish 6th Grade Art Teacher Prep	Language Arts-Group A Social Studies-Group B
Wednesday	School Meeting 8:45am- Social Emotional Literacy	9:15am- Math (Split)	Novel Study-Group A Writing Workshop-Group B	Writing Workshop-Group A Writing Workshop-Group B
Thursday	Math (Split)	9:15am- Social Studies-Group A Language Arts-Group B	5th Grade Art 6th Grade Spanish Teacher Prep	Language Arts-Group A Social Studies-Group B
Friday	Math (Split)	SSR Typing	Social Studies-Group A Language Arts-Group B	Language Arts-Group A Social Studies-Group B